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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,420	05/10/2001	Tetsujiro Kondo	450100-03213	6765
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EXAMINER				
SCHNEIDER, JOSHUA D				
ART UNIT		PAPER NUMBER		
2182				

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,420

Applicant(s)

KONDO ET AL.

Examiner

Joshua D. Schneider

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection. Winkelman does not explicitly discuss the use of noise filtering, but does teach device specific conversion to this device independent color space is needed in order to uniformly translate the information for further processing regardless of the type of input device. It is seen in the prior art that it is also well known that this type of conversion may lead to quantization errors. This quantization noise may be eliminated through a well known process called dithering.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 8, 12, 14, 15, 16, 19, 23, 24, 25, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,668,890 to Winkelman in further view of U.S. Patent 6,031,937 to Graffagnino. With regards to claims 1, 14, and 15, the use of input interface means to interface with a plurality of input devices is inherent in Figure 1 (elements 1-3, connected to element 7). Winkelman teaches common processing means independent of the input device information data received (Fig. 1, elements 8 and 8c, column 2, lines 52-55), and variable processing means dependent on an input device information data received via the input device interface (Fig. 1, elements 7 and 12, and column 2, lines 47-50). Winkelman is not

explicit what the device independent color space is, though several viable options are recognized as well known (Fig. 2, elements 15, especially RGB and R'G'B'). Graffagnino teaches that these transfer systems have to correct for the different systems interpretation of color. Dithering is used to reduce the level of quantization noise (column 11, lines 60-64). It would have been obvious to one of ordinary skill in the art to combine the common processing of Winkelman with the dithering of Graffagnino in order to create a system that eliminates the noise due to quantization.

4. With regards to claims 4, 16, 23, and 24, the use of output interface means to interface with a plurality of output devices is inherent in Figure 1 (elements 4-6, connected to element 12). Winkelman teaches common processing means independent of the output device information data supplied (Fig. 1, elements 8 and 8c, column 2, lines 52-55), and variable processing means on an output device information data supplied via the output device interface (Fig. 1, elements 7 and 12, and column 2, lines 47-50).

5. With regards to claims 8, 12, 19, 25, 28, and 29, the use of storage interface means to interface with a plurality of storage devices is inherent in Figure 1 (element 6, connected to element 12). Winkelman teaches common processing means independent of the storage device information data received or supplied (Fig. 1, elements 8 and 8c, column 2, lines 52-55), and variable processing means dependent on a storage device information data received or supplied via the storage device interface (Fig. 1, elements 7 and 12, and column 2, lines 47-50).

6. With regards to claims 3, 6, 10, 18, 21, and 27, Winkelman teaches the interface functioning as an interface with each of at least two input devices (Fig. 1, elements 1-5, connected to element 7) and output devices (Fig. 1, elements 4-6, connected to element 12).

7. With regards to claims 7, 11, 13, and 22, it would have been obvious to one of ordinary skill in the art at the time of invention that any of an input interface, an output interface, or a storage interface could be integrated into the same interface. It is well known in the art with combination input and output devices such as scanner/printers, and with storage devices in that data is input and output from a storage device, that input, output and storage are often done through a common interface.

8. With regards to claim 27, Winkelman teaches the interface functioning as an interface with each of at least two input devices (Fig. 1, elements 1-5, connected to element 7) and output devices (Fig. 1, elements 4-6, connected to element 12). It would have been obvious to one of ordinary skill in the art at the time of invention that the connections to multiple input and output devices could also be to multiple storage devices, as the connection would be no different in general nature than that of the connections to any of the multiple input and output devices shown. Furthermore, the output device shown in Fig. 1, element 6, is a storage device, and multiple instances of such a device would have also been obvious to one of ordinary skill in the art.

9. Claims 2, 5, 9, 17, 20, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,668,890 to Winkelman and U.S. Patent 6,031,937 to Graffagnino in further view of U.S. Patent 6,189,050 to Sakarda. With regards to claims 2, 5, 9, 17, 20, and 26, Winkelman fails to explicitly teach the detection of the type of the attached devices, though it may be inherent in the connection of the different types of input and output devices, needing different types of conversion processes, as shown in Fig. 1. The detection of device type was well known in the art at the time of invention. Sakarda teaches detecting of device type in a

computer processing system so that devices may be added and removed as necessary (Fig. 4). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the processing system of Winkelman with the device recognition of Sakarda to create a more robust processing system which can recognize input, output, and storage devices, in order to provide greater system stability and flexibility in a competitive computer market

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDS


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